

Sub P1
cont'd
P2
cont'd

wherein said iron carbide film has a body-centered tetragonal structure and a c-axis constitutes an axis of hard magnetization and a c-plane constitutes a plane of easy magnetization, and

wherein the α' phase is a martensite phase.--

CANCEL claim 4.

Sub P1
cont'd
P3

--6. (amended) A magnetic thin film according to claim 4, wherein said axis of hard magnetization constitutes a direction which is perpendicular to the film surface and said plane of easy magnetization constitutes a direction, which is horizontal to the film surface.--

Sub P1
cont'd
P4

--11. (amended) A magnetic thin film according to claim 1, wherein said iron carbide film is formed on a surface of a thin film having an interatomic distance that is within $4\text{\AA} \pm 10\%$ of said iron carbide film.

--12. (amended) A magnetic thin film according to claim 11, wherein the principal element constituting said thin film has lattice constants that are within $4\text{\AA} \pm 10\%$ of those of said iron carbide film.--

Add the following new claims:

Sub P1
--39. (new) A magnetic thin film consisting of an iron carbide film, said iron carbide film comprising a martinsite phase as a principal phase and at least carbon and iron as constituent elements,

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wherein said iron carbide film has a body-centered tetragonal structure and a c-axis constitutes an axis of hard magnetization and a c-plane constitutes a plane of easy magnetization, and

wherein said plane of easy magnetization of the magnetic film is a direction horizontal to the film.--

--40. (new) The magnetic thin film according to claim 1, wherein the film has a saturation magnetic flux density of 1.5 T or greater and a coercive force of 2 Oe or less.

41. (new) The magnetic thin film according to claim 40, wherein the film has a saturation magnetic flux density of 2.0 T or greater and a coercive force of 1 Oe or less.--

R E M A R K S

A substitute Abstract of the Disclosure is provided on an accompanying separate sheet.

Claims 1-15 and 25-38 were pending in the application.